

*Please provide the following information, and submit to the NOAA DM Plan Repository.*

**Reference to Master DM Plan (if applicable)**

*As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.*

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

**1. General Description of Data to be Managed****1.1. Name of the Data, data collection Project, or data-producing Program:**

2017 NOAA NGS Topobathy Lidar DEM (with voids): Fort Lauderdale to Miami (FL)

**1.2. Summary description of the data:**

These data were collected by the National Oceanic and Atmospheric Administration (NOAA), National Geodetic Survey (NGS), Remote Sensing Division (RSD), Coastal Mapping Program (CMP) using a Riegl VQ880G system. Quantum Spatial Inc (QSI) was contracted by NOAA to process the topobathymetric LiDAR data. The NOAA Miami Florida Intracoastal Topobathy (Miami Intracoastal) data were acquired from 20170224 - 20170310 in five missions. The Miami Intracoastal dataset includes topobathy data in a LAS 1.2 format file with the following classification: unclassified (1), ground (2), noise (7), overlap default (19), overlap ground (20), overlap water column (21), water column (25), bathymetric bottom or submerged topography (26), submerged feature (29), and temporal bathy bottom (31) in accordance with project specifications. The contracted project consists of approximately 53,381 acres along the Atlantic Coast of Miami, Florida. This dataset delivery represents the full NOAA Miami Florida Intracoastal Topobathy LiDAR Processing area. LAS files were compiled by 500 m x 500 m tiles. The final classified LiDAR data were then used to create topobathymetric DEMs in IMG format with 1m pixel resolution. This Miami Intracoastal dataset represents an area covering 15 - 5000 m x 5000 m DEM tiles.

**1.3. Is this a one-time data collection, or an ongoing series of measurements?**

One-time data collection

**1.4. Actual or planned temporal coverage of the data:**

2017-02-24 to 2017-03-10

**1.5. Actual or planned geographic coverage of the data:**

W: -80.19251, E: -80.098619, N: 26.118616, S: 25.744208

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*

**1.7. Data collection method(s):**

*(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)*

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:****1.8.1. If data are from another observing system, please specify:****2. Point of Contact for this Data Management Plan (author or maintainer)****2.1. Name:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.4. E-mail address:**

coastal.info@noaa.gov

**2.5. Phone number:**

(843) 740-1202

**3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:****3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?****4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):****5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.*

### **5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible**

*(describe or provide URL of description):*

Process Steps:

- 2018-08-20 00:00:00 - Data for the NOAA Miami Florida Intracoastal Topobathy LiDAR Processing project data was acquired by the National Oceanic and Atmospheric Administration (NOAA) using a Riegl VQ-880G Topobathy LiDAR system. All delivered LiDAR data is referenced to: Horizontal Datum-NAD83 (2011) epoch: 2010 Projection-UTM Zone 17N Horizontal Units-meters Vertical Datum-NAVD88 (Geoid12b) Vertical Units-meters This Miami Intracoastal dataset encompasses 1064 500m x 500m tiles in eastern Miami, Florida. Green and NIR (for water surface model creation that is used during refraction of the green bathymetric data) LiDAR data were acquired with the Riegl sensor VQ-880G. QSI ran and automated grounding and performed manual editing to review all classification and improve the final topobathy surface. QSI's LasMonkey was used to update LAS header information, including all projection and coordinate reference system information. The final LiDAR data are in LAS format 1.2 and point data record format 3. The classification scheme is as follows: 1-Unclassified 2-Ground 7-Noise 19-Overlap Default 20-Overlap Ground 21-Overlap Water Column 25-Water Column 26-Bathymetric Bottom or Submerged Topography 29-Submerged feature 31-Temporal Bathymetric Bottom
- 2018-08-20 00:00:00 - QSI transformed the ellipsoid heights of the final LiDAR data into orthometric heights referenced to NAVD88 using Geoid 12B to create the DEMs. The topobathymetric DEM was output at 1 meter resolution in IMG format into 5000 m x 5000 m tiles. The Miami Intracoastal raster is clipped to the extent of the tile grid and named according to project specifications. Void DEM dataset- A void shapefile was created to indicate areas where there was a lack of bathymetric returns. This shape was created by triangulating bathymetric bottom points with an edge length maximum of 4.56m to identify all areas greater than 9 square meters without bathymetric returns. This shapefile was used to exclude interpolated elevation data from these areas.

**5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**

### **5.2. Quality control procedures employed (describe or provide URL of description):**

## **6. Data Documentation**

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented,*

*specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.*

**6.1. Does metadata comply with EDMC Data Documentation directive?**

No

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

Missing/invalid information:

- 1.6. Type(s) of data
- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

**6.2.1. If service is needed for metadata hosting, please indicate:**

**6.3. URL of metadata folder or data catalog, if known:**

<https://www.fisheries.noaa.gov/inport/item/56115>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: [https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\\_PD-Data\\_Documentation\\_v1.pdf](https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf)

**7. Data Access**

*NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted*

*to justify any approach other than full, unrestricted public access.*

**7.1. Do these data comply with the Data Access directive?**

**7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?**

**7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:**

**7.2. Name of organization of facility providing data access:**

NOAA Office for Coastal Management (NOAA/OCM)

**7.2.1. If data hosting service is needed, please indicate:**

**7.2.2. URL of data access service, if known:**

<https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=8728>

[https://coast.noaa.gov/htdata/raster2/elevation/NGS\\_FL\\_Miami\\_DEM\\_Void\\_2017\\_8728/](https://coast.noaa.gov/htdata/raster2/elevation/NGS_FL_Miami_DEM_Void_2017_8728/)

**7.3. Data access methods or services offered:**

This data can be obtained on-line at the following URL: <https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=6271>;

**7.4. Approximate delay between data collection and dissemination:**

**7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**

**8. Data Preservation and Protection**

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

**8.1. Actual or planned long-term data archive location:**

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

**8.1.1. If World Data Center or Other, specify:**

**8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:**

**8.2. Data storage facility prior to being sent to an archive facility (if any):**

Office for Coastal Management - Charleston, SC

**8.3. Approximate delay between data collection and submission to an archive facility:**

**8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

**9. Additional Line Office or Staff Office Questions**

*Line and Staff Offices may extend this template by inserting additional questions in this section.*